

### Patient advice and liaison service (PALS)

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## Denosumab (Prolia®) for Osteoporosis

### A patient's guide



## What is osteoporosis?

Osteoporosis occurs when the struts which make up the mesh-like structure within bones become thin causing them to become fragile and break easily, often following a minor bump or fall. These broken bones are often referred to as 'fragility fractures'. The terms 'fracture' and 'broken bone' mean the same thing. Although fractures can occur in different parts of the body, the wrists, hips and spine are most commonly affected. It is these broken bones or fractures which can lead to the pain associated with osteoporosis. Spinal fractures can also cause loss of height and curvature of the spine.

## What is Denosumab?

Denosumab is an osteoporosis medication prescribed to help strengthen your bones and reduce your risk of breaking a bone. It is available as a six-monthly subcutaneous injection.

Denosumab is an antibody that slows down the natural rate your bones are broken down. It works by blocking a protein and suppressing the cells that break down bone. Despite being an antibody, Denosumab doesn't suppress your immune system. This means it doesn't increase your risk of complications from infections (e.g.: Coronavirus). You don't need to take special measures to protect yourself from infection. You can and should continue to take your medication.

## References

Drug treatments for osteoporosis: Denosumab (Prolia) Factsheet. Royal Osteoporosis Society version 2, October 2017

The best thing to do is speak to your doctor or pharmacist. They can assess if there's a better treatment for you. They can also help you work out whether denosumab is causing the symptoms, or if something else is the cause, such as another medication.

If you experience:

- Numbness or tingling in your fingers, toes or around your mouth
- Muscle spasms, twitches or cramps please contact your doctor immediately.

There are some more serious but very rare health conditions associated with denosumab:

Osteonecrosis of the jaw - when the mouth fails to heal quickly, usually following invasive dental procedures

Atypical (unusual) broken bones in the thigh - a break to the thigh bone that occurs with little or no force after taking the medication for a long time

If you are prescribed denosumab, your doctor has decided the benefit of taking the treatment outweighs any risks.

## Getting your injection

It's important that you have adequate levels of calcium and vitamin D when you're taking denosumab. For this reason, your doctor takes a blood test before the injection, to check your levels. If you're not getting enough calcium from your diet or enough vitamin D from sunlight exposure, you can consider supplements.

## How long to take it?

Denosumab is generally prescribed long term, so you need to be happy it is the right option for you. To get the full benefits, denosumab should be taken regularly as instructed by your doctor or pharmacist. There's no formal guidance on how long you should continue to take denosumab. In some cases, it can be prescribed for a decade or even longer. Your doctor will review your treatment, every so often, to check it's still the best option for you.

## Administration

Denosumab is a subcutaneous injection. A decision on whether you're able to self-administer should be made by your healthcare professional, together with you. Your healthcare professional then can enrol you in the Prolong patient support programme or refers you to a healthcare professional who can support you. If you're accepted on to the Prolong patient support programme, you can collect your injection from a pharmacy. You can self-administer the injection or, if you have a carer, they can do it for you. To help you do the injection, you can watch a video tutorial on [Prolia.co.uk](http://Prolia.co.uk).

## Delayed injection

It's important that your next injection isn't delayed for more than four weeks, as the benefits wear off quickly. This causes a sudden drop in bone density and increases your risk of spinal fractures. You can have repeat injections up to four weeks early, so you have some flexibility.

## Ending your treatment

When you come to the end of your treatment, you should start taking another osteoporosis treatment straight away.

This is because stopping denosumab causes a sudden drop in bone density and increases your risk of spinal fractures. Following denosumab with another osteoporosis treatment has been found to stop this from happening. Spinal fractures caused by this sudden drop in bone density are called rebound fractures.

In rare cases, you might be advised to stop taking denosumab without a follow-on treatment. This happens if your risk of breaking a bone is very low, and the decision should always be made by an osteoporosis specialist.

## If you experience side effects

It's perfectly natural to be concerned by side effects although, in most cases, they do pass.